

What is claimed is:

1. (original) A method for detecting the motion of an element relative to a sensor arrangement, wherein
 - switching signals (1) are evaluated as a function of a pulse transmitter passing in front of the sensor, and
 - a switching hysteresis (H) is adapted in the evaluation as a function of the values of the switching signal (1), wherein
 - when the element moves below a predetermined limiting value (f_{Grenz}), a relatively great switching hysteresis (Hyst0) is set, and when the limiting value (f_{Grenz}) is exceeded, a reduced switching hysteresis (H1) is set.
2. (original) The method as recited in Claim 1, wherein
 - the predetermined limiting value is a limiting frequency (f_{Grenz}) for the measured switching signals (1).
3. (currently amended) The method as recited in Claim 1 ~~or 2~~, wherein
 - to detect the motion of a rotatable element, the switching signals (1) of a trigger wheel, as the pulse transmitter, are evaluated.
4. (currently amended) The method as recited in ~~one of the preceding claims~~ claim 1, wherein
 - a previously measured amplitude of the switching signal (1) is used to determine the relatively great switching hysteresis, as the starting hysteresis (Hyst0).
5. (currently amended) The method as recited in ~~one of the Claims 1 through 3~~ claim 1,

wherein

- a fixed value is used for the relatively great switching hysteresis, as the starting hysteresis (Hyst0), and/or the reduced switching hysteresis (H1) after the limiting value (f_{Grenz}) is exceeded.

6. (currently amended) A sensor arrangement for performing a method according to ~~one of the preceding claims~~ claim 1,

wherein

- the sensor arrangement has contactless sensors with Hall elements or magnetoresistive elements.

7. (original) The sensor arrangement as recited in Claim 6,

wherein

- the sensor arrangement is used as a rotational speed sensor in a motor vehicle.